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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Kazuichi Ooe

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EXAMINER

TSEGAYE, SABA

ART UNIT

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/501,716	<b>Applicant(s)</b> OOE, KAZUICHI	
	<b>Examiner</b> SABA TSEGAYE	<b>Art Unit</b> 2467	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 May 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 12-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 24-28 is/are allowed.
- 6) ☒ Claim(s) 12-20 and 23 is/are rejected.
- 7) ☒ Claim(s) 21 and 22 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)         | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 05/10/10 has been entered.

2. Claims 12-28 are pending. Claims 24-28 are allowed.

### ***Claim Objections***

3. Claims 18, 19 and 21 objected to because of the following informalities:

Claim 18, line 2, the phrase “the other communication devices” is informal.

Line 4, the phrase “the other communication device” is informal.

Claim 19, line 7, the phrase “each of the communications” is informal.

Claim 21, line 2, the phrase “each of the other communication devices” is informal

Appropriate correction is required.

### ***Claim Rejections - 35 USC § 101***

4. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 18 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. In accordance with the new USPTO's "Interim Patent Subject Matter Eligibility Examination Instructions" issued on August 24, 2009, 101 rejections will be applied if the claimed computer readable medium (even storage medium, for example) is not clearly defined to exclude non-statutory transitory media such as signals or transmission media. In order to give patentable weight to a computer readable medium claim, the medium must be non-transitory.

***Claim Rejections - 35 USC § 102***

5. Claims 12, 13, 19 and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Kosaka (US 6,574,209 B1).

Regarding claim 12, Kosaka discloses a communication method of performing communications between a communication device (*portable telephone; party A*) and other communication device (*party B*) each capable of performing communications (*...a receiver-transmitter that receives and transmits high frequency signals...*) in a plurality of different communication modes (*voice & image mode and image mode*), the method comprising:

measuring communication performances (*measuring amplifier temperature*) of communication between the communication device (party A) and the other communication device (party B) by communicating between the communication device and the other communication device in each of the plurality of different communication modes (*voice & image mode and image mode*), under a plurality of different

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communication conditions (*communication speeds*) for each of the different communication modes (*voice mode and data mode*) respectively;

determining, as a threshold, a communication condition that the corresponding measured communication performance of communication between the communication device and the other communication device in one of the communication modes exceeds a measured communication performance of communication in the other communication mode based on a result of the measurement (*Fig. 1, step 4, it is determined whether the transmitting amplifier temperature is higher than a predetermined first threshold..*);

selecting, before performing actual communication between the communication device and the other communication device under a certain communication condition (communication speed), a communication mode that the communication performance of a communication between the communication device and the other communication device under the certain communication condition of the actual communication exceeds the communication performance of the other communication mode as an optimum communication mode, by comparing the communication condition of the actual communication and the determined threshold (*.. the transmitting speed is controlled to a predetermined second speed that is slower than the predetermined first speed when the temperature of the transmitting amplifier exceeds the predetermined first temperature; and the transmitted speed is controlled again to the predetermined first speed when the temperature of the transmitting amplifier becomes below a predetermined second temperature that is lower than the predetermined first temperature...as shown in Fig. 1*);

and

performing the actual communication between the communication device (party A) and the other communication device (party B) in the selected communication mode *(both of the voice and image data are transmitted during the period in which commutation is performed at the high speed. when the communication speed is switched to the low speed to avoid overheating of the device, only the voice data are transmitted... see Abstract; column 2, lines 6-36).*

Regarding claim 13, Kosaka discloses wherein the communication device is **capable of** communicating with the a plurality of other communication devices the measuring of communication performances and the determining of the threshold are performed for each of the communication devices (...Fig. 1 shows communication between two parties. However, Kosaka discloses a radio communication device such as portable telephone that operates under the CDMA system, which is **capable of** communicating with plurality of other communication devices...).

Regarding claim 19, Kosaka discloses a method for optimizing communication condition of a communication between a communication device (party A) and other communication device (party B), the method comprising:

communicating , on a same communicating line, with the other communication device in both a first communication mode (*voice & image mode*) and in a second communication mode (*image mode*) that is different from the first communication mode respectively, under a plurality of different communication conditions (*communication speeds*);

obtaining communication performances for each of the communications with the other communication device (*Fig. 1, step 4, it is determined whether the transmitting amplifier temperature is a higher than a predetermined first threshold..*);

measuring a communication performance in the first communication mode, and a communication performance in the second communication mode under each of the different communication conditions (...when the transmitting amplifier temperature is lower than a predetermined first temperature, communication speed of the device set high speed. when the transmitting amplifier temperature exceeds the first temperature during operation at the high speed, the communication speed is automatically switched to a low speed...; *column 2, lines 17-27*);

determining, based on the communication performances measured under each of the different communication conditions, a communication condition in which a communication performance of the first communication mode exceeds a communication performance of the second communication mode (*both of the voice and image data are transmitted during the period in which commutation is performed at the high speed. when the communication speed is switched to the low speed to avoid overheating of the device, only the voice data are transmitted... see Abstract; column 2, lines 6-36*); and

before starting communication with the other communication device in a particular communication condition, selecting, among the first communication mode and the second communication mode, a communication mode corresponding to a particular communication condition and the other communication device, for actually communicating with the other communication device under the particular communication

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condition, that the communication performance exceeds that of the other communication mode (*both of the voice and image data are transmitted during the period in which commutation is performed at the high speed. when the communication speed is switched to the low speed to avoid overheating of the device, only the voice data are transmitted... see Abstract; column 2, lines 6-36*).

Regarding claim 23, Kosaka discloses wherein one of the communication performance of communication is communication speeds of the communication between the other communication device under the different communicating condition and the communication mode (...when the transmitting amplifier temperature becomes below a second temperature that is lower than the first temperature the communication speed is switched back to the high level to resume transmission of both voice and image data...Abstract; Fig. 1, steps 7, 8 and 1).

### ***Claim Rejections - 35 USC § 103***

6. Claims 14, 15, 18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kosaka in view of Vembu (US 6,259,928 B 1).

Regarding claims 14, 15, 20, Kosaka discloses all the claim limitations as stated above; except for the communication condition is a size of data.

Vembu teaches determining system performance based number of frame (size of data) received with errors or on the number of errors in the received signal. (See Fig. 3, steps 308, 312; column 10, lines 1-6).



It would have been obvious to one ordinary skill in the art at the time the invention was made to incorporate size of data, such as that suggested by Vembu, to determining communication condition disclosed by Kosaka. One of ordinary skill in the art would have been motivated to do this because the size of data allows the receiver to know if a packet fails to transmit, or if the packets get transmitted out of sequence.

Regarding claim 18, Kosaka discloses all the claim limitations as stated above, except for a computer readable medium.

However, Kosaka discloses, in fig. 3, relation between the transmitting amplifier temperature  $T_{ta}$  and the communication speed controlled under the **program** shown in Fig. 1 (column 5, lines 22-24). Therefore, it would have been obvious to one ordinary skill in the art at the time the invention was made to use computer readable medium. The benefit using computer-readable medium is that programs can be changed and upgraded and new features are added easily than hardware changes.

7. Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kosaka in view of Vembu as applied to claim 15 above, and further in view of Liu et al. (US 6,252,900 B1).

Kosaka in view of Vembu discloses all the claim limitations as stated above, except for a table that stores a relationship between a communication data size and a communication mode.

Liu teaches a communication system that includes table 560 that stores a relationship between communication data size (number of frames) and a communication

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mode (column 18, lines 12-47). It would have been obvious to one ordinary skill in the art at the time the invention was made to use a table, such as that suggested by Liu, in the system of Kosaka in view of Vembu in order to provide an efficient system and increase transmission speed.

***Allowable Subject Matter***

8. Claims 21 and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. Claims 24-28 are allowed.

***Response to Arguments***

10. Applicant's arguments with respect to claims 12-28 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SABA TSEGAYE whose telephone number is (571)272-3091. The examiner can normally be reached on Monday-Friday (7:30-5:00), First Friday off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pankaj Kumar can be reached on (571) 272-3011. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Saba Tsegaye  
Examiner  
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